

Please delete the present Abstract of the Disclosure.

Please add the following new Abstract of the Disclosure:

A method, apparatus, and article of manufacture for persistent code coverage data collection is provided. Initially, a program for which code coverage data should be collected is identified and divided into code coverage tasks (i.e. basic blocks) and each code coverage task is given a unique name. Coverage points are then inserted into the program source code at the beginning of each coverage task to produce an instrumented program. The instrumented program is then compiled and link-edited with an appropriate library to produce a program executable. A set of test cases to be run for a persistent code coverage data collection purposes is identified next. Then, the code coverage database is created using the identified code coverage tasks and the test cases. The program executable is loaded and run with the set of identified test cases to write coverage point information into an output file. The output file is then processed in order to populate the code coverage database with the code coverage data per each code coverage task. When the program is modified, the new and modified code coverage tasks and the new test cases identified and the code coverage database is updated accordingly. The code coverage data for the non-affected code coverage tasks is preserved for testing of the new version of the program eliminating the need for running the entire test bucket. The code coverage database may be queried to determine which test cases need to be rerun.